# Statement from the Associate Director for Weapons Physics

The history of Los Alamos National Laboratory is one of heroic accomplishment in a time of great danger. As midwife to the birth of the fission bomb and fusion bomb and as the leader of the miniaturization of both, the Laboratory has its place in history ensured. To continue to serve national security after World War II—optimally and convincingly—the Laboratory had to diversify. The element in diversification that has endured to the present emerged from a daring initiative, namely, the creation of the Los Alamos Neutron Science Center (LANSCE), formerly LAMPF. Notwithstanding pessimism on the part of most experts, the facility came online 34 years ago—on schedule and on budget—as the major interdisciplinary laboratory in the United States supporting both nuclear weapons technology and fundamental science (from medicine to astrophysics). It also contributed significantly to the reduction in international tensions by welcoming scientists from within and outside the United States in its unclassified programs.

LANSCE has remained a wellspring of new knowledge and applied technologies. Its contributions to the weapons program are steadily increasing through the new technology of proton radiography, the ultimate diagnostic tool for fission devices, and through the symbiotic relationship between LANSCE's Isotope Production Facility and Weapons Neutron Research Facility, which are producing the first results on the nuclear physics of short-lived isotopes. Those results provide essential data for predicting the nuclear performance of weapons, while results on materials aging from LANSCE's Lujan Center are solving essential questions on the lifetime of components in the stockpile.

The United States is still facing serious threats. Thus, our need to have strong, multidisciplinary national-security laboratories is no less, and may be greater, than it was when LAMPF was conceived. Critical investments are needed now so that LANSCE continues to drive the frontiers of science and technology for the benefit of national security.

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